

S/120/63/000/001/050/072
E192/E582

AUTHOR: Abramov, A.N.

TITLE: Ultralow-frequency generator of short pulses

PERIODICAL: Pribery i tekhnika eksperimenta, no. 1, 1963,
170 - 171

TEXT: The generator is shown in Fig. 1. This is essentially a Schmitt trigger with a capacitance C_1 connected to its input grid, which is charged through the resistance R_1 . Initially, the first tube is cut off and the second tube is conducting. A regenerative changeover takes place in the circuit when a voltage sufficient for opening the first tube is reached on C_1 . Since $R_{a1} > R_{a2}$, the voltage at the cathodes of the tubes falls

sufficiently for the potential on the grid of the first tube to be above the common-cathode potential and so C_1 discharges through the grid-cathode resistance of the first tube and the resistance R_k . The network $R_2 = R_3$ is designed so that the second tube becomes conducting when the voltage across C_1 becomes equal to

Card 1/2

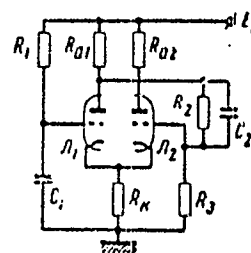
Ultralow-frequency generator

S/120/63/000/001/050/072
E192/E382

that of the cathode potential. The second changeover is thus attained and the circuit returns to its initial state. It is advisable to connect the thyatron across C_1 in the practical generator circuit. This reduces the discharge time of C_1 and permits reduction of the pulse duration to 0.2 μ s. A circuit furnished with a thyatron was built and it was found that the frequency instability was 0.2 - 0.9% and that the mark-to-space ratio of 10^{-3} could be obtained. There are 2 figures.

ASSOCIATION: Institut fiziki AN ArmSSR
(Institute of Physics of
the ArmSSR)

SUBMITTED: April 8, 1962



Card 2/2

Fig. 1:

KOLOMIN, Gennadiy Andreyevich; ABRAMOV, Anatoliy Nikolayevich;
BUSHUYEV, Anatoliy Petrovich; GRABILIN, Yu.N., otv.red.

[Making 901 m. of drift in one month with the FK-3
cutter-loader at the Polysaeva-2 Mine] 901 m shtreka v
mesiatse kombinatom FK-3 na shakhte "Polysaevskaya-2."
Moskva, TSentr. in-t informatsii i tekhniko-ekon. issle-
dovaniy ugol'noi promyshl., 1963. 11 p. (MIRA 17:7)

ABRAMOV, A.N.; KOLOMIN, G.A.

Making 1245 m of drift with the PK-3 combine. Ugol' 39 no.11:24-27
N '64. (MIRA 18:2)

1. Shakhta "Polysayevskaya-2" kombinata Kuzbassugol'.

L 11589-66 EWT(1) IJP(c)

ACC NR: AP5027683

SOURCE CODE: UR/0051/65/019/005/0868/0832

AUTHOR: Tolstoy, N. A.; Abramov, A. P.

ORG: None

TITLE: Nonlinear quenching of manganese chloride luminescence with increased excitation intensity ^{21, 44, 55}

SOURCE: Optika i spektroskopiya, v. 19, no. 5, 1965, 830-831

TOPIC TAGS: luminescence quenching, luminescent crystal, luminescence center, luminophor

ABSTRACT: The authors investigate the excitation by strong light of monomolecular luminophors in the intermediate excitation intensity region where the probability of forced emission becomes equal to the probability of spontaneous emission (the case of "superluminescence"). The radiation centers in luminescent crystals used normally for the generation of emission of superluminescence appear usually in "diluted" concentrations. The present note deals with the kinetic characteristics of luminosity in the intermediate region for a system of "undiluted" concentration of luminous centers, i.e., for monomolecular luminophors of the "pure salt" type. Measurement results are presented for the quenching time τ and the radiation yield η as a function of the excitation intensity E

Card 1/2

UDC: 535.373.2

ABRAMOV, A.P., inzhener; ZAKHAROV, A.G., kandidat ekonomicheskikh nauk.

More accurate calculation of haulage costs. Vest.TSNII MPS 15,
no.2:40-42 S '56. (MLRA 9:12)
(Railroads--Cost of operation)

ABRAMOV, A.P., inzhener.

Monetary evaluation of improving the use of freight containers.
Trudy TSNII MPS no.120:67-82 '56. (MLRA 9:12)
(Railroads--Freight)

ABRAMOV, A.P.; ZAKHAROV, A.B.; KOTOV, G.V.; PESKOVA, I.N., redaktor;
KIRILOV, P.A., tekhnicheskiiy redaktor.

[Cost of hauling railroad freight and freight rates.] Sebestoimost' zheleznodorozhnykh perevozok i gruzovye tarify. Moskva, Gos.transp. zhel-dor.izd-vo, 1957. 177 p. (Moscow, Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no.134).

(MLBA 10:7)

(Railroads--Rates)

ABRAMOV, A.P.

Ways of lowering costs when opening freight container points.

Vest. TSNII MPS 16 no.7:47-49 0 '57.

(MLRA 10:11)

(Railroads--Freight)

ABRAMOV, A.P., inzh.

Determining efficient distances for transporting freight in
containers. Trudy TSNII MPS no.162:208-225 '58.

(MIRA 12:4)

(Railroads--Freight)

(Containers)

ABRAMOV, A.P., kand. ekon. nauk; BARKOV, N.N., kand. ekon. nauk;
SIMANOVSKIY, M.A., kand. ekon. nauk

Economic evaluation of measures for a greater efficiency of
transportation. Zhel. dor. transp. 41 no.10:16-20 0 '59.
(MIRA 13:2)
(Railroads--Freight)

ABRAMOV, A.P.; KOTOV, G.V.; SHCHERBAKOV, P.D., retsenzent; GUBAREVA, N.T.,
red.; USENKO, L.A., tekhn. red.

[Cost of rail freight transportation and how to reduce it] Sebe-
stoimost' zheleznodorozhnykh perevozok i puti ee snizheniia. Mo-
skva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshche-
niia, 1961. 41 p. (MIRA 14:7)

(Railroads--Cost of operation) (Railroads--Freight)

ABRAMOV, A.P., kand.ekon.nauk; YELISEYEVA, T.V., inzh.; FILIPPOVA, L.S.,
red.; KHITROVA, N.A., tekhn. red.

[Costs of various types of freight transportation by railroad]
Sebestoimost' perevozok razlichnykh gruzov na zheleznykh dorogakh. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei
soobshcheniia, 1961. 27 p. (MIRA 14:12)
(Railroads—Freight) (Railroads—Cost of operation)

ZAKHAROV, A.G., kand.ekon.nauk, nauchnyy sotrudnik; SHISHOV, G.A.,
inzh.-ekonomist, nauchnyy sotrudnik; ZAKHAROVA, Z.I., inzh.-
ekonomist, nauchnyy sotrudnik; TVERSKOY, K.N., retsenzent;
~~ABRAMOV, A.P.~~, retsenzent; PETRUKHNOVSKIY, I.V., retsenzent;
KUZNETSOV, A.N., retsenzent; KOLTUNOVA, M.P., red.; USENKO, L.A.,
tekhn.ied.

[Economic evaluation of the operational indices of railroads]
Ekonomicheskaya otsenka ekspluatatsionnykh pokazatelei raboty
dorog. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei
soob., 1961. 174 p. (Moscow. Vsesoyuznyi nauchno-issledovatel'skiy
institut zheleznodorozhnogo transporta. Trudy, no.218)

(MIRA 15:1)

1. Sektor ekonomiki Ural'skogo otdeleniya Vsesoyuznogo nauchno-
issledovatel'skogo instituta zheleznodorozhnogo transporta (for
Zakharov, Shishov, Zakharova).

(Railroads - Cost of operation)

ABRAMOV, A.P., kand.ekon.nauk

Estimating labor input in technical and economic calculations.

Vest. TSNII MPS 20 no.2:40-46 '61. (MIRA 14:3)

(Time study) (Railroads---Cost of operation)

ABRAMOV, A.P., kand.ekonom.nauk; YELISEYEVA, T.V., inzh.

Improving the railroad transportation rates. Vest.TSNII MPS
20 no.5:52-55 '61.

(Railroads--Rates)

(MIRA 14:8)

YELISEYEVA, T.V., inzh.; ABRAMOV, A.P., kand.ekon.nauk

Need for more flexible methods for the calculation of transportation costs ("Calculation and analysis of railroad transportation costs" by V.N.Orlov, A.S.Chudov. Reviewed by T.V.Eliseeva, A.P. Abramov). Zhe1.dor.transp. 43 no.2:94-96 F '61. (MIRA 14:4)
(Railroads—Cost of operation)
(Orlov, V.N.) (Chudov, A.S.)

ABRAMOV, A.P.; KOTOV, G.V., kand.ekonom.nauk

Some economic problems of the utilization of the new types
of traction. Zhel.dor.transp. 44 no.8:37-41 Ag '62.
(MIRA 15:8)
(Railroads--Costs of operation)

ABRAMOV, A. P., kand. ekonom. nauk; SIMANOVSKIY, M. A., kand. ekonom. nauk; TRUBIKHIN, M. G., kand. ekonom. nauk; FLEYSHMAN, P. M., kand. ekonom. nauk

Ways of improving the planning and material incentive in railroad management. Zhel. dor. transp. 45 no.1:55-60 Ja '63.
(MIRA 16:4)

(Railroads—Management)

ABRAMOV, A.P., kand.ekonom.nauk

Potentials for a further reduction of operation costs for passenger
transportation. Zhel.dor.transp. 45 no.8:21-25 Ag '63.
(MIRA 16:9)

(Railroads—Cost of operation)

ABRAMOV, A.P., kand.ekonom.nauk

Methods for the financing of the initial and final operations. Zhel.-
dor.transp. 45 no.12:21-23 D '63. (MIRA 17:2)

ABRAMOV, A.P., kand.ekonom.nauk; IZOSIMOV, A.V., kand.ekonom.nauk

Utilization of the rolling stock and cost reduction in passenger traffic.
Zhel.dor.transp. 46 no.11:15-22 N '64.

(MIRA 18:1)

ABRAMOV, A.P., kand.ekon. nauk; YELISEYEVA, T.V., kand. ekon. nauk

Potentials for reducing the maintenance costs of passenger
cars. Vest. TSNII MPS 24 no.6:10-14 '65. (MIRA 18:9)

1 24266-46 EWT(1)/EWT(m)/ENP(e) IJP(c) WH

ACC NR: AP6007013

SOURCE CODE: UR/0051/66/020/002/0345/0346

AUTHOR: Tolstoy, N. A.; Abramov, A. P.

ORG: none

TITLE: Nonlinear quenching of the luminescence of ruby under intense excitation

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 345-346

TOPIC TAGS: ruby, luminescence quenching, optic center, light excitation, light absorption, activated crystal, relaxation process, temperature dependence, luminescence spectrum

ABSTRACT: This is a continuation of earlier work (Opt. i spektr. v. 19, 830, 1965), where a new type of luminescence² quenching, connected with interaction between excited centers, was discovered. To check whether this nonlinear quenching is connected in some way with the spatial proximity of excited states which originate in the initial act of absorption of the exciting light, the authors carried out experiments to determine whether nonlinear quenching occurs in the activated crystals whose radiation centers are diluted. The tests were made on powdered synthetic ruby containing a high concentration of chromium (2.5%). Measurements were made of the yield and relaxation, using the same experimental apparatus as in the earlier study. A pulse method for measuring yield was employed, and will be described later. Plots were taken of the decay time of the R line of ruby as a function of temperature in both weak and intense excitation, of the yield and initial decay time as functions of the intensity of the exciting light. The decay time was practically uniform over the

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UDC: 621.375.9: 535.004.14

L 24261-66

ACC NR: AF6007013

entire spectrum at all temperatures, owing to the high chromium concentration. The nonlinear quenching was observed not only in the region of the R lines, but also in the remaining parts of the luminescence spectrum. This quenching was manifest in a nearly two-fold reduction of the decay time with increase in intensity. The nonlinear quenching is observed at lower concentrations, too, down to 0.5%. However, other conditions being equal, it becomes weaker as the chromium concentration decreases. This concentration dependence will be investigated in a later paper. It is concluded that the new type of quenching is not a characteristic of pure salts only with undiluted radiation centers, but can also occur in activated crystals with a low concentration of luminescence centers. This result is of importance for establishing the mechanism whereby excited states interact to produce nonlinear quenching of luminescence. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 12May65/ ORIG REF: 001

Card 2/2 dda

L 27208-66 EWT(1) IJP(c)

ACC NR: AP6011567

SOURCE CODE: UR/0051/66/020/003/0495/0498

AUTHOR: Abramov, A. P.

ORG: none

TITLE: On the possible theoretical interpretation of nonlinear quenching

SOURCE: Optika i spektroskopiya, v. 20, no. 3, 1966, 496-498

TOPIC TAGS: luminescence quenching, photoluminescence, luminor, activated crystal, ruby nonlinear effect, luminescence center, quantum yield, kinetic equation

ABSTRACT: The author explains theoretically a new type of photoluminescence quenching (quenching of the third kind or nonlinear quenching) which they have observed previously (Opt. i spektr. v. 20, 345, 1966 and v. 19, 830, 1965) in luminors of the type of pure salts (uranyl salts, manganese chloride) are activated crystals (ruby with appreciable chromium concentration). A kinetic equation is set up to describe the nonlinear quenching, on the basis of the assumption that the excited state migrates over the luminescence centers and the number of migration events during the time of the excited state is sufficiently large. The excited state when migrating can be transferred not only to a non-excited

Card 1/2

UDC: 535.373.2.001.1

L 27208-66

ACC NR: AP6011567

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center but also to a center which is already in the excited state. This doubly-excited center serves as the center of the nonlinear quenching, inasmuch as the quantum yield of its luminescence is half the yield of the ordinary excited center. A stationary solution is obtained for the derived kinetic equation and theoretically obtained quantum yield, calculated from this solution, agrees satisfactorily with experiment. The results show that from the formally-kinetic point of view the luminescence to the presence of quenching of the third kind can be characterized as consisting of monomolecular glow with bimolecular quenching. Orig. art. has: 2 figures and 9 formulas.

SUB CODE: 20/ ORIG REF: 004/ SUBM DATE: 27May65/

Card 2/2 CC

I 31507-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG

ACC NR: AP6013037

SOURCE CODE: UR/0051/66/020/004/0742/0744

AUTHOR: Tolstoy, N. A.; Abramov, A. P.; Abramova, I. N.

ORG: none

TITLE: Binary centers produced by light in uranyl salts

SOURCE: Optika i spektroskopiya, v. 20, no. 4, 1966, 742-744

TOPIC TAGS: uranyl nitrate, uranium compound, luminor, luminescence center, fluorescence quenching, low temperature research, relaxation process, excited state, *LIGHT EXCITATION*

ABSTRACT: This is a continuation of earlier work (Opt. i spektr. v. 20, 496, 1966 and earlier), dealing with a newly observed nonlinear extinction of monomolecular luminors when exposed to high-intensity light. This extinction is strongly pronounced in uranyl salts. The present note reports another unique phenomenon observed by the authors in uranyl salts excited with ultraviolet at low temperature, wherein prior excitation with a strong uv dose at liquid-nitrogen temperature causes a decrease in the stationary glow brightness and the relaxation time. This decrease is ascribed to the formation of some centers in the uranyl salt. These centers remain stable so long as the temperature remains low. The phenomenon was

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UDC: 535.370

L 31507-66

ACC NR: AF6013037

observed in uranyl sulfate, uranyl nitrate, and cesium-uranyl nitrate, and was strongest in the latter. Measurements of the relative relaxation times and an analysis of the data indicate that the formation of the centers is a nonlinear process, and that the centers are binary combinations of excited state, but an explanation of the effect calls for more research. Orig. art. has: 1 figure and 1 table.

SUB CODE: 20/ SUBM DATE: 27Sep65/ ORIG REF: 003

Card 2/2 mc

L 04829-67 EWP(j)/EWT(m) RM
ACC NR: AP6026968 SOURCE CODE: UR/0051/66/021/002/0171/0177

AUTHOR: Tolstoy, N. A.; Abramov, A. P.

ORG: none

TITLE: Luminescence of uranyl salts at an increased level of optical excitation

SOURCE: Optika i spektroskopiya, v. 21, no. 2, 1966, 171-177

TOPIC TAGS: uranium compound, luminescence center, luminescence quenching, UV irradiation, *LIGHT EXCITATION*

ABSTRACT: The kinetics of photoluminescence of uranyl salts at an increased excitation level were studied by using IFK-120 and ISK-25 flash lamps with a UFS-2 ultraviolet filter. The salts were coarsely crystalline powders of $\text{Cs}[\text{UO}_2(\text{NO}_3)_3]$, $\text{UO}_2 \cdot \text{SO}_4 \cdot 2\text{H}_2\text{O}$ in the form of layers held between quartz plates, and also $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ in the form of a thin layer fused in between quartz plates. The relaxation time τ and relative yield η were found to decrease with rising excitation intensity. It is shown that this phenomenon cannot be accounted for by the heating of the luminophor under the influence of the exciting light, but constitutes a new type of quenching ("quenching of the third kind") due to an increase in the probability of nonradiative transitions with increasing concentration of the excited luminescence centers. The observed phenomena cannot be alternatively interpreted as being the result of an increase in the probability of radiative transitions or of an apparent decrease in

Card 1/2

UDC: 535.37

L 04829-67

ACC NR: AP6026968

yield due to the increased transparency of the substance subjected to strong excitation. The nonexponential character of the law of luminescence quenching at the increased excitation level is demonstrated. It is postulated that the phenomena described are due to the meeting of migrating excitations on a single luminescence center. Orig. art. has: 5 figures and 9 formulas.

SUB CODE: 20/ SUBM DATE: 23Apr65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 *gd*

L 10180-63

EWI(1)/EWP(a)/EWI(m)/BDS/FEC(b)-2--

AFPTG/ASD/SSD---GG/WH/IJP(C)/EH

ACCESSION NR: AP3000587

S/0051/63/014/005/0691/0699

AUTHOR: Toistoy, N. A.; Abramov, A. P.

TITLE: Kinetics of emission of chromium luminophors²¹ VII. The ruby (Part 3)
On the interaction of chromium ions. Steady-state emission

SOURCE: Optika i spektroskopiya, v. 14, no. 5, 1963, 691-699

TOPIC TAGS: luminescence of ruby

TEXT: The seventh article in a series on the kinetics of emission of chromium luminophors reports the results of quantitative studies of the ratio of steady-state emission intensity of side lines ("dimer" emission) to main doublet emission intensity ("monomer" emission) in finely powdered ruby (microcrystals grown from solutions) having various Cr concentrations. This ratio increases with concentration, first linearly and then "superlinearly." The intensity of the linear section can be explained on the basis of dimer "density" theory only if it is assumed either that the absorption of the excitation light is 10 times greater for dimers than for monomers or that the number of dimers is 10 times greater than statistically

Card 1/2

L 10180-63

ACCESSION NR: AP3000587

predicted. Analysis of the superlinear section shows sensitization of the dimers by the monomers, beginning at 0.25% Cr concentration. This sensitization decreases with increased temperature. An alternate explanation of the linear and superlinear sections, based on dimer properties, is offered. Monomer emission of the ruby is shown to have an extension into the long-wave region. The emission from this region increases with increased temperature. "The authors warmly thank P. P. Feofilov for his valuable discussions." Orig. art. has: 5 figures, 5 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 20Jul62 DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 007

OTHER: 000

jj/arc
Card 2/2

ABRAMOV, A. S.

ABRAMOV, A.S.; SHEYNIN, B.I.; LEBEDEV, M.V., redaktor; NOVOCHADOV, A.G.,
redaktor; GUROVA, O.A., tekhnicheskiiy redaktor.

[Fuel, furnaces and boiler installations] Toplivo, topki i kotel'nye ustanovki. Moskva, Izd-vo Ministerstva kommunal'nogo
khoziaistva RSFSR, 1953. 247 p. (MLRA 7:8)
(Boilers)

I 18316-65 EWJ(j)/EWT(1)/EWP(e)/EWG(k)/EWT(m)/EPP(c)/EPP(n)-2/EPR/EEC(b)-2/EWP(b)
 Iz-6/Pr-4/PS-4/Iu-4 I-6/c/A-6/ I-6A/A7/A7
 ACCESSION NR: AP4040522 010000/64/17/005/0319/0335

AUTHOR Millionshchikov, M. D.; Gverd'steli, I. G.; Abrarov, E.
 A. S.; Gorlov, I. I.; Zhukov, V. F.;
 Kukharkin, N. V.; Kishore, E. V.; Merkin, V. I.;
 Nechayev, Yu. A.; Pozdnyakov, B. S.; Ponomarev-Stepnoy, N. N.;
 Samarin, Ye. N.; Serdyukov, V. I.; Yakovlev, S. I.;
 Yakutovich, M. I.; Koshkin, V. I.

TITLE: The "Romashka" high-temperature reactor-converter /9

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 329-335

TOPIC TAGS: nuclear power reactor, reactor feasibility study, re-
 search reactor, thermoelectric converter/Romashka

ABSTRACT: The authors report on the results of the study of the
 most promising parameters of the "Romashka" reactor-converter.

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18316-05

ACCESSION NR: AP4049532

converter unit, which has been in operation at the Kurchatov Atomic Energy Institute since August 1964. The fuel used is uranium dioxide enriched to 90% ^{235}U . Graphite and beryllium are used as reflectors. Electricity is generated by silicon-germanium semiconductor thermocouples distributed on the outer surface of the reflector and connected in four groups which can be connected in series or in parallel. The temperatures of the active zone and outer surface are 1770 and 1000C, respectively. The power ratings are 0.50—0.80 kW electric and 40 kW thermal, the maximum current (parallel connection) is 88 A, the neutron flux is 10^{13} neut/cm² sec in the center of the active zone and 7×10^{12} on its boundary. The reactor has a negative temperature reactivity coefficient. The equipment has high inherent stability and requires no external regulator, and little change was observed in the thermocouple properties after 2500 hours of operation. The reactor is a prototype for a small, portable, and simple to operate reactor for use in the field.

Card 2/3

316-65

ACCESSION NR: AP4049532

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 000

OTHER REF: 000

ADD PRESS: 3155

BAKUL', V.N., kand. tekhn. nauk; ABRAMOV, A.S., inzh.; SKRIPKO, G.F., inzh.

Diamond consumption in machining various brands of hard alloys.
Mashinostroenie no.1:97-99 Ja-F '63. (MIRA 16:7)

(Diamonds, Industrial) (Metal cutting)

ABRAMOV, A.S.; MENDEL'SON, V.S.; FREYDIN, G.Yu.; POGOREL'SKIY, M.A.;
BOBKOV, L.I.; SELEKH, V.F.

Designing die casting molds for diamond tools. Mashinostroitel'
no.11:30-32 N '64 (MIRA 18:2)

MILLIONSHCHIKOV, M.D.; GVERDTSITELI, I.G.; ABRAMOV, A.S.; GORLOV, L.V.;
GUBANOV, Yu.D.; YEFREMOV, A.A.; ZHUKOV, V.P.; IVANOV, V.Ye.;
KOVYRZIN, V.K.; KOPTILOV, Ye.A.; KOSOVSKIY, V.G.; KUKHARKIN,
N.Ye.; KUCHEROV, R.Ya.; LALYKIN, S.P.; MERKIN, V.I.; NECHAYEV,
Yu.A.; POZDNYAKOV, B.S.; PONOMAREV-STEPNOY, N.N.; SAMARIN, Ya.N.;
SEROV, V.Ya.; USOV, V.A.; FEDIN, V.G.; YAKOVLEV, V.V.; YAKUTOVICH,
M.V.; KHODAKOV, V.A.; KOMPANIYETS, G.V.

High-temperature reactor-converter "Romaashka." Atom. energ.
17 no.5:329-335 N '64. (MIRA 17:12)

L 6574-66 EWT(1)/EWA(h)/ETC(m) WW

ACC NR: 25025050

SOURCE CODE: UR/0286/65/000/016/0091/0091

AUTHORS: Viktorov, V. A.; Petrov, B. N.; Abramov, A. S.; Maslov, G. S.;
Khokhlov, V. P.; Samsonov, G. A.

ORG: none

TITLE: Resonance level gauge. Class 42, No. 173971

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 91

TOPIC TAGS: liquid level indicator, resonator, *HF oscillator*, *electronic circuit*

ABSTRACT: This Author Certificate ²⁵ presents a resonance level gauge containing a high frequency oscillator for exciting a resonance detector with a step frequency characteristic and a frequency modulator for periodic variation of the oscillator frequency in the range of the level variation. To increase the accuracy of discrete measurement of the liquid level ^{at} given points, the device is provided with tank circuits excited by the oscillator at the same time with the detector. The tank circuits are tuned to the frequencies determined by the given values of the measured level. With the coincidence of the resonance frequency of the detector and the resonance frequency of the corresponding tank circuit, the signal

Card 1/2

UDC: 681.128.82

L 6574-66

ACC NR: AP5025050

from the tank circuit is fed in parallel with the detector signal to the inputs of coincidence circuits which are connected to the signal device (see Fig. 1).

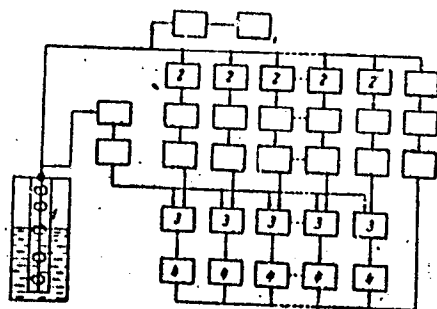


Fig. 1. 1- detector; 2- tank circuits; 3- coincidence circuits; 4- signal device

Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 28Mar64

Card 2/2

L 7639-66 EWT(1)/EWA(h)/ETC(m) WJ

ACC NR: AP5025053

SOURCE CODE: UR/0286/35/000/016/0092/0092

AUTHORS: Viktorov, V. A.; Petrov, B. N.; Abramov, A. S.; Maslov, G. S.;
Khokhlov, V. P.; Samsonov, G. A.

ORG: none

TITLE: Resonance level gauge. Class 42, No. 173974

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 92

TOPIC TAGS: liquid level indicator, resonator, *electronic circuit, electronic oscillator*

ABSTRACT: This Author Certificate presents a resonance level gauge containing a frequency-modulated oscillator for exciting the resonance detector and tank circuits tuned to the frequencies corresponding to the discrete values of the measured level divided in height at equal intervals. To increase the accuracy of digital level measurement, with nonlinear variation of the detector and oscillator output characteristics, the gauge is provided with a device in the form of trigger counters. These counters determine the number of scale pulses from the tank circuits given off with the coincidence of the oscillator frequency and the resonance frequency of the corresponding tank circuit until the appearance of the detector

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UDC: 681.128.82

L 7639-66

ACC NR: AP5025053

pulse. The gauge is also provided with a device for determining the time lag of the detector pulse relative to the immediately preceding scale pulse. These devices are connected through controllable logic switch elements respectively to the output of the tank circuits and to the output of the clock oscillator (see Fig. 1).

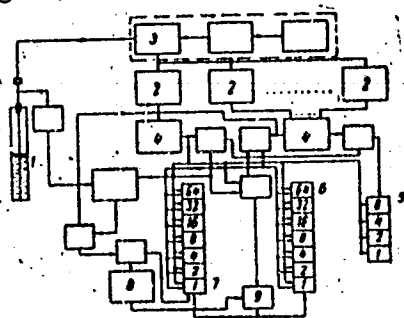


Fig. 1. 1- detector; 2- tank circuits; 3- frequency-modulated oscillator; 4- scale pulse counter; 5- counter for time lag of detector pulse relative to immediately preceding scale pulse; 6- logic elements; 7- switches; 8- clock oscillator; 9- counter for determining time interval between two scale pulses

To increase the accuracy of measurements, the gauge is provided with a device for determining the time interval between scale pulses. The device is in the form of a trigger counter connected to the clock oscillator by two electric channels with switches. One of the switches is controlled by the logic elements. The

Card 2/3

L 7639-66

ACC NR: AP5025053

other is opened by the detector pulse and is closed by the immediately following scale pulse. Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 28Mar64

Card 3/3

~~ABRAMOV~~, Aleksey Sergeyevich; MILOVANOV, I.V., red.; ~~POTEKHIN~~, I.I., red.;
SHVEDOV, A.A., red.; VADEYEV, O., red.; KLIMOVA, T., tekhn. red.

[Ethiopia, a country that has not been brought to its knees]
Efiofiia - strana, ne vstavshaia na koleni. Moskva, Gos. izd-vo
polit. lit-ry, 1961. 108 p. (MIRA 14:8)
(Ethiopia--Description and travel)

ABRAMOV, A.T.

New method for expediting surveying during the exploration of
highway sites. Avt.dor. 22 no.8:20-22 AG '59.

(MIRA 12:11)

(Roads--Surveying)

S/135/62/000/003/007/001
A006/A101

AUTHOR: Abramov A. T., Technician

TITLE Electric slag welding in ship repair

PERIODICAL: Svarchnoye proizvodstvo, no. 3, 1962, 32 - 33

TEXT: Information is given on the use of electric slag welding in ship repair using conventional semi-automatic welding machines ПШ-5 (PSR-5) or ПШ-4 (PSR-4) with a modified holder whose flux-containing attachment was removed and whose nozzle was replaced by a prolonged one. The same materials as in conventional welding can be used, namely AN-348, AN-8 and PIs-7 fluxes, Sv-08 and Sv-08A wire. For the welding of steels containing up to 0.2% Cu, 0.6 - 0.8% Mg and 0.4 - 0.6% Si, it is recommended to use wires with higher Si and Mg content (Sv-15, Sv-100, Sv-08UESA). To join parts by electric slag welding, special forms are required. Best results were obtained with a ceramic form, to be used once. The part is fixed on a steel plate and Dinas brick bars with the aid of a bentonite solution prepared with liquid sodium glass. Additionally, the part is fastened to the form by steel clamps. The finished form is precalculated for 30 - 36 hours at 15 - 20°C. Prior to welding the part mounted in the form is preheated to 500 -

On 1/1/2

Electric slag welding in ship repair

5/135/62/000/003/007/009
A006/A101

600°C. Welding is conducted directly on the assembly plate at 180 - 300 m/hour wire feed rate, 300 - 350 amps welding current, 45 - 60 V voltage. The welder moves along the welding pool at a speed of 25 - 30 m/hour and 5 - 6 mm distance from the part edges. The electrode wire throat should not exceed 60 - 70 mm. The slag pool is 40 - 45 mm deep. After completed welding the form is removed, the part is then heated to 850 - 900°C for 1.5 - 2 min per 1 mm of its thickness and air-cooled. Electric slag welding is by 10 - 12 times more efficient than manual welding. It is used in ship repair for the welding of flanges onto shafts and stocks, for butt-welding of shafts and stern posts, and for the welding-up of apertures. There are 4 figures.

ASSOCIATION: Odesskiy sudoremon'nyy zavod no. 1 (Odessa Ship Repair Plant no. 1)

Card 2/2

ABRAMOV, A.T., inzh.

Using TSCh-4 electrodes in ship repairs. Svar. proizv. no.6:21
Je. '63. (MIRA 16:12)

1. Odesskiy sudoremontnyy zavod No.1.

APPROVED, A. V.

23872 Opyt Mekhanizatsii Shtabovoychikh Delot. Mekhanizatsiya Delovoychikh i
Shtabovoychikh Delot, 1949, No. 8, S. 24-26

NO: INTERNAL NO. 31, 1949

ABRAMOV, A. V., inzh.

Drawing of the pipe ends of pipe from stainless steel. Energo-
mashinostroenie 8 no.12:38 D '62. (MIRA 16:1)

(Pipe, Steel)

(Heat exchangers—Equipment and supplies)

ABRAMOV, ALEKSANDR VASIL'YEVICH

PHASE I BOOK EXPLOITATION

755

L'vov, Dimitriy Sergeyevich, Rozhdestvenskiy, Yuriy L'vovich,
Abramov, Aleksandr Vasil'yevich, Litvak, Lev Kosilevich

Shtampovka kol'tsevykh zagotovok (Pressforming of Annular Parts)
Moscow, Mashgiz, 1958. 182 p. 4,500 copies printed.

Reviewer: Zvorono, B. P., Candidate of Technical Sciences; Ed.:
Mezhova, V. A., Engineer; Tech. Ed.: Gerasimova, Ye. S.;
Managing Ed. for literature on heavy machine building
(Mashgiz): Golovin, S. Ya., Engineer.

PURPOSE: This book is intended for production engineers, designers, technicians and students specializing in pressforming and forging of metals.

COVERAGE: The authors analyze the coefficient of utilization of metals in manufacturing annular blanks for rolling-contact bearings. They present the latest work methods developed by bearing plants which aim to produce blanks of good dimensional accuracy. Advanced pressforming and forging methods used in the

Card 1/6

Pressforming of Annular Parts

755

manufacture of precision annular blanks are described. There are 22 references of which 18 are Soviet, 3 English, and 1 German.

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755

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AVAILABLE: Library of Congress

Card 6/6

GO/wde
11-4-58

ABRAMOV, A.V.

Cutter head for pipe beveling. Biul. TSIICHM no.10:44 '60.

(MIRA 15:4)

(Cutting tools--Patent)

PREDTECHENSKIY, A.A.; ABRAMOV, A.V.; TARANEK, V.A.

Stratigraphy of the Pre-Cambrian formations of the Eastern Sayan
Mountains. Trudy SNIIGGIMS no.29:20-26 '64.

(MIRA 1883)

L 24357-66 FSS-2/EWT(1.)

ACC NIT: AP6005958

SOURCE CODE: UR/0127/66/000/002/0057/0060

AUTHOR: Sofronov, A. V.; Abramov, A. V.; Nizovoy, Yu. K.; Nefedov, A. P.; Vitsenl, Ye. M.

27
25
B

ORG: none

TITLE: The development and application of "dynamo-reactive" grenade launchers in the mining industry

SOURCE: Gornyy zhurnal, no. 2, 1966, 57-60

TOPIC TAGS: mining engineering, grenade, ground weapon, weapon launcher

ABSTRACT: In 1960, the Ramenskoye Branch of VNIIGeofiziki (Ramenskoye stdeleniye VNIIGeofiziki) began research on the design of a firing system to eliminate overhangs in mining operations. One of the most acceptable versions of the design is a system operating on the recoilless weapon principle: the "dynamo-reactive" cannon

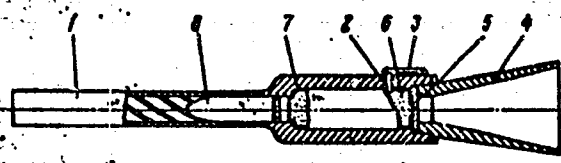


Fig. 1. Diagram of a recoilless cannon.

1 - Barrel; 2 - cap bushing; 3 - firing mechanism; 4 - nozzle; 5 - bottom plate; 6 - cartridge; 7 - cartridge case; 8 - shell

Card 1/2

UDC: 621.926.1.

2

L 24357-66

ACC NR: AP6005958

(see Fig. 1). The advantages of the proposed device are: small caliber, low weight, no recoil with high power, high maneuverability, and the opportunity of firing dummies or high-explosive projectiles. Further research resulted in the design of the DRS-130 dynamo-reactive grenade launcher (see Fig. 2). The results obtained in

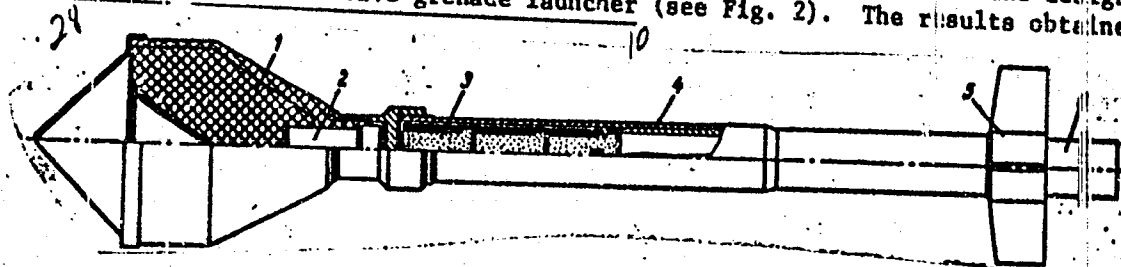


Fig. 2. The DRS-130 dynamo-reactive grenade launcher.

1 - Shell; 2 - igniter; 3 - powder charge; 4 - charge chamber; 5 - fins; 6 - barrel.

ballistic tests were excellent and tests were conducted under field conditions. In addition to its main function, the grenade launcher may also be used to string cable, to eliminate the danger of avalanches, and to break up ice formations in rivers. Orig. art. has: 4 figures and 1 table.

[08]

SUB CODE: 19/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 002/

Card 2/2

ABRAMOV, A.Ya. (Tashkent)

Treatment of isolated fracture of the sternum by fixation with
a metal nail. Ortop., travm. i protez. 20 no.5:56-57 My '59.
(MIRA 12:9)

(STERNUM, fract.

osteosynthesis with metal nail in isolated
fract. (Rus))

ABRAMOV, A. Ya

1ST AND 2ND ORDERS																										PROCESSES AND PROPERTIES INDEX																										3RD AND 4TH ORDERS																																																			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ	KKK	LLL	MMM	NNN	OOO	PPP	QQQ	RRR	SSS	TTT	UUU	VVV	WWW	XXX	YYY	ZZZ	AAA	BBB	CCC	DDD	EEE	FFF	GGG	HHH	III	JJJ	KKK	LLL	MMM	NNN	OOO	PPP	QQQ	RRR	SSS	TTT	UUU	VVV	WWW	XXX	YYY	ZZZ
<p>Investigation of the secondary electron emission of mica. M. S. Kosman, A. Ya. Abramov and R. P. Gurley. <i>J. Appl. Phys.</i> (U.S.S.R.) 9, 176-177 (1968). The coeffs. of reflection of electrons from degassed mica surfaces were detd. for potentials up to 700 v. in a total gradient of 500 v. The curves shown in 5 figs. have max. at ca. $\sigma = 1.8$ at 300 v. for mica, $\sigma = 1.21$ at 500-600 v. for Ta. The <u>Monten</u> effect was established for mica and aluminum oxide. E. H. Rathmann</p>																																																																																																							

ABRAMOV, A. Ya

N:

8

6435 Energy Levels of Mn^{55} and V^{51} . A. Ya. Abramov.
Doklady Akad. Nauk S.S.S.R. 73, 921-4(1950) Aug. 11.
(In Russian).

A study was made of the energy distribution of protons emitted from Mn and V targets, in the reactions $Mn^{55}(d,p)Mn^{55}$ and $V^{51}(d,p)V^{51}$, the deuteron energy being 3.8 ± 0.1 Mev. After traversing a wedge-like filter, the protons traversed a photographic plate, leaving short tracks whose number per unit area decreased across the plate. The track-frequency curve presented steps, corresponding to energy levels, at definite wedge thicknesses. Taking into account the possible presence of processes $C^{12}(d,p)C^{12}$ and $O^{16}(d,p)O^{16}$, the following excitation levels were determined: for Mn^{55} 1.22, 1.77, 2.07, 2.45, and 2.82 Mev; for V^{51} 0.72, 1.31, 1.65, 2.04, 2.37, and 2.75 Mev. The mass differences are: $Mn^{55} - Mn^{54} = 1.00111 \pm 0.00016$ and $V^{51} - V^{50} = 1.00076 \pm 0.00016$ mass units.

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ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

...the concentration was too high, and the conditions were those corresponding to the Zeeman effect in moderately strong fields.

AUTHOR: Abramov, A. Ya., Kononovich, L. I. SOV/32-24-8-19/43

TITLE: The Use of Autoradiography in Investigating Non-Transparent Objects (Primeneniye avtoradiografii k issledovaniyu neprozrachaykh ob"yektov)

PERIODICAL: Zvezdskaya Laboratoriya, 1958, Vol. 24, Nr 8, pp. 964-965(USSR)

ABSTRACT: The so-called track-autoradiography differs from the usual contrast-radiography in that the distribution of radioactivity is studied not from the blackening of the emulsion but from the single tracks which the radiation produces in the emulsion. Furthermore, the quantitative determination of the distribution is not carried out photometrically, but by a calculation of the tracks. The method has several disadvantages, but does have the advantage that exceptionally small amounts of radioactive isotopes can be used. This method was used to investigate the distribution of the radioactive lead isotope (Pb210) in lead-antimony alloys. In the given analytical procedure it is mentioned that a photographic emulsion (type "R from MUKF") was used in thicknesses of 10 μ and 15-20 μ . It was observed that the best experimental results were obtained when a greater portion of the half-life

Card 1/2

The Use of Autoradiography in Investigating Non-Transparent Objects

SOV/32-24-8-19/43

was used for investigation, in which case the time of exposure can last 6 - 8 days. These investigations were purely methodical in nature, however, and it cannot be assumed that Pb-Sb systems formed under all conditions of alloy formation will contain nothing but the pure components of the alloy. A. P. Turutov participated in the work. There are 2 figures.

ASSOCIATION: Leningradskiy tekhnologicheskii institut
(Leningrad Technological Institute)

2011 P

18(7)

AUTHORS: Abramov, A. Ya., Kononovich, L. I.

SOV/32-25-9-20/53

TITLE: Determination of Solubility of Lead in Antimony According to the Method of Tracer Counting

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 9, pp 1081-1083 (USSR)

ABSTRACT: The method already described (Ref 1) for investigating nontransparent objects with the aid of "tracer autoradiography" can also be used for the determination of a slight solubility of the components in polyphase systems. As the data from publications concerning the solubility of lead in antimony are very contradictory (Ref), the above mentioned method was used for these determinations. The atoms of the solved substance were directly counted. A small quantity of radioactive lead was added to the alloy Sb - Pb and a liquid photoemulsion (NIKFI Type M. R.) was then applied to the carefully pre-treated ground specimens. A. P. Turutov developed the emulsion and counted the traces of Pb made visible in the Sb by the α -rays with a microscope (magnification of 600). The computations were made by taking into consideration the radioactive Bi which was present due to the application of a radioactive lead (produced from an active

Card 1/2

Determination of Solubility of Lead in Antimony
According to the Method of Tracer Counting

SOV/32-25-1-20/53

precipitate of thorium emanation)(Table). From the diagram obtained (Fig) for an alloy with 80% Sb and an alloy with 60% Sb it can be seen that Pb is soluble in antimony by 7.6 - 9.6 wt% or 4.6 - 5.6 atom%. There are 1 figure, 1 table, and 2 Soviet references.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut
(Leningrad Technological Institute)

Card 2/2

KONONOVICH, I.I.; ABRAMOV, A.Ya.

Method for calculating the solubility of metals from the radio-
isotope distribution. Izv. vyz. ucheb. zav. (fiz. no. 7:53-59
'64. (MIRA 17:6)

1. Leningradskiy tekhnologicheskiy institut tselnyatsenn-
nosty promyshlennosti.

ACC NR: AR6033115 SOURCE CODE: UR/0137/66/000/007/1043/1043

AUTHOR: Abramov, A. Ya.; Semenov, V. Ye.

TITLE: Changes in microhardness during strengthening of metals and alloys by nuclear-particle radiation

SCURCE: Ref. zh. Metallurgiya, Abs. 7I276

REF SOURCE: Tr. Leningr. tekhnol. in-ta tsellyulozno-bum. prom-sti, vyp. 18, 1965, 175-181

TOPIC TAGS: plastic deformation, microhardening, alloy steel, microhardness, metal strengthening, metal irradiation, nuclear radiation, ion/ShKh15 steel, P18 steel, U8 steel

ABSTRACT: Different grades of steel in various initial states were exposed to irradiation with alpha and beta particles in a dose of $2 \cdot 10^{10}$ and $3 \cdot 10^{11}$ per 1 cm^2 , and with gamma rays from a Co^{60} source of an 0.75 m/curie activity. Changes in microhardness (M) were then studied for 100 days. Irradiation with a $2 \cdot 10^{10}$ dose of alpha particles with an energy of 5 and 15 Mev at 20C resulted in an increase of M in preannealed ShKh15 steel. But no increase of M in hardened ShKh15 and

Card 1/2

UDC: 539.4.019.3:539.104:669.14

ACC NR: AR6033115

P18 steel was observed. An insignificant increase of M was observed in U8 steel. Alpha-particle irradiation of nonmagnetic specialty steel in an initial strongly work-hardened state did not produce an appreciable change in M. Its irradiation with gamma rays of 1-Mev and with 2.25-Mev beta particles resulted in a more complex character of the change in M. It is supposed that it is possible to use the effect of nuclear particles on metal as a method of redistributing the dislocations in it, which were produced by the previous manufacturing processes. Experiments have shown that the strengthening effect of irradiation remains even after subsequent strengthening by plastic deformation. It is supposed that Me strengthening by irradiation is a method with potentials, especially in the use of multiply charged ions. L. U. inov. [Translation of abstract]

SUB CODE: 20/

Card 2/2

ABRAMOV, A Ye.

PUGACHEV, A.S.; ABRAMOV, A.Ye., retsenzent; KORKIN, M.S., nauchnyy redaktor, kandidat tekhnicheskikh nauk; DLUGOKARSKAYA, Ye.A., tekhnicheskiiy redaktor.

[Collection of problems on shipbuilding drafting] Sbornik zadach po sudostroitel'nomu chercheniu. Leningrad, Gos. soiuзное nauchno-tekhn. izd-vo sudostroit. promyshlennosti, 1954. 235 p. [Microfilm]
(MIRA 8:2)
(Naval architecture--Problems, exercises, etc.) (Mechanical drawing)

76.9.2.12. 2.12.
ABRAMOV, A.Ye., master; FREYMAN, Yu.A., master.

New automatic control arrangement for centralized lubricating
systems for hydraulic turbine-generator units. Elek.sta. 29
no.1:77-79 Ja '58. (MIRA 11:2)
(Hydraulic turbines--Lubrication)
(Automatic control)

ABRAMOV B.

COUNTRY : BULGARIA V
 CATEGORY : Pharmacology and Toxicology. Cardiovascular
 AGENTS
 ASS. JOUR. : REHABIL., No. 5 1959, No. 2, 206
 AUTHOR : Abramov, B.
 INST. :
 TITLE : A Substance from the Fruits of *Comm. Carvi* L.
 with Hypotensive Action. (Preliminary Report)
 ORIG. PUB. : Farmatsiya (Bulg.), 1957, 7, No 3, 32
 ABSTRACT : A substance in the shape of white, odorless and
 tasteless crystals, with a melting point of 241° ,
 soluble in water and acids, less so in hot alcohol,
 and insoluble in organic solvents, was isolated. This
 substance does not react to glycosides, alkaloids and
 coumarins, contains nitrogen, and is neutral in an
 aqueous solution. It is supposed to be an amino acid.
 Tentative pharmacolo-

Card: 1/2

45

ABRANOV, B., agronom

Molybdenum helps to obtain better pulse crops. Nauka i pered.
op. v sel'khoz. 9 no.3:26 Mr '59. (MIRA 12:5)

1. Kolkhoz "Traktor," Urenskogo rayona, Gor'kovskoy oblasti.
(Legumes) (Molybdenum)

ABRAMOV, B.

Wages and production quality. Sots. trud 5 no.5:123-126 My '60.
(MIRA 13:11)

1. Glavnyy inzhener Kupavinskoy tonkosukonnoy fabriki.
(Staraya' Kupavna--Wool industry--Quality control)
(Wages and labor productivity)

ABRAMOV, B., sud'ya respublikanskoy kategorii; SIMONOV, V., master sporta,
g. Leningrad; MARCHENKO, A.; KRASNOGOLOVYY, V. (g. Riga);
BROKTSITTER, G. (Karagandinskaya obl.)

Create, invent, test. Kryl. rod.11 no.12:28-29 D '60.

(MIRA 14:3)

1. Rukovoditel' aviamodel'nogo kruzhka stantsii yunych tekhnikov
g. Kishinev (for Marchenko).
(Airplanes)

IKOMASOV, A.; ABRAMOV, B., inzh.

Let's shorten the time required to build the Votkinsk Hydroelectric Power Station. Na stroi.Ros. no.12:6-8 D '61.

(MIRA 16:1)

1. Nachal'nik upravleniya stroitel'stva Votkinskoy gidroelektricheskoy stantsii (for Ikomasov).

(Votkinsk Hydroelectric Power Station)

ABRAMOV, B.

Servicing wells with power-driven units. Neftnik 9 no.9:15
S '64 (MIRA 18:2)

ABRAMOV, B.; SHUBIN, V.

Peas in northern Gorkiy Province. Zemledelie 24 no.1:45-46
'62. (MIRA 1962)

1. Predsedatel' opytно-pokazatel'nogo kolkhoza "Traktor", Urenskogo rayona (for Abramov). 2. Glavnyy agronom kolkhoza "Traktor", Urenskogo rayona (for Shubin).
(Gorkiy Province--Peas)

ABRAMOV, B.

Posters of the State Agriculture Publishing House. Okhr. truda i sots.
strakh. 5 no.6:30 Je '62. (MIRA 15:7)
(Agriculture machinery—Safety measures) (Posters)

ABRAMOV, B. (Tula)

There is no noise in the chopping section. Okhr. truda i sots. strahli.
5 no.8:39 1~ '62. (MIRA 15:7)
(Metalworking machinery)

ABRAMOV, B., inzh.

Concrete muscles of dams. Tekh.mol. 30 no.9:4 '62. (MIRA 15:9)
(Ingur hydroelectric power stations--Dams)

ABRAMOV, B.A.; GUMENYUK, N.U., inzh.; BALTER, A.L., kand.tekhn.nauk.

"Nap raising on woolen fabrics" by S. B. Salikhova. Reviewed
by B.A. Abramov, N.U. Gumeniuk, A.L. Balter. Tekst.prom, 17
no.12:64-66 D '57. (MIRA 11:1)

1.Glavnyy inzhener Kupavinskoy fabriki (for Abramov)
(Woolen and worsted manufacture)
(Salikova, S.B.)

ABRAMOV, B.A., inzh.

At Kupavna fine-woolen cloth factory. Izobr.1 rats. no.7:14-16
Jl '58. (MIRA 11:9)
(Starala Kupavna--Woolen and worsted manufacture)

137-58-6-11032

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 9. (USSR)

AUTHOR: Abramov, B.A.

TITLE: Conferences on the Quality of Urals Steel Ingots (Soveshchaniya po kachestvu stal'nogo slitka na Urale)

PERIODICAL: Izv. Vost. fil. AN SSSR, 1957, Nr 6, p 147

ABSTRACT: Information is presented on conferences convened in Sverdlovsk in November 1956 and February 1957 by the Steel-ingot Quality Study Commission of the Urals Branch of the Academy of Sciences, USSR. A brief summary is presented of a paper by A.A. Popov, "Modern Theories on the Crystallization of the Steel Ingot"; the major directions being pursued in improving ingot quality at plants in the Urals are indicated: selection of rational weights, ingot shape, mold construction, conditions for vacuum pouring of steel, and the use of vibration in the steel crystallization process. Note is taken of work done on casting large ingots in vacuum, the introduction of longer ingots, preparation of hot tops from molten slag, development of rolling of heat-resistant steel, etc. 1. Steel--Production 2. Steel--Processing
Card 1/1 3. Steel--Crystallization U.N.

ABRAMOV, B.A., inzh., nauchnyy red.

[Full use of chromites and limonites from the Serov deposit]
Kompleksnoe ispol'zovanie burokhromistykh rud Serovskogo
mestorozhdeniya. Sverdlovsk, TSentr.biuro tekhn.informatsii,
1959. 158 p. (MIRA 14:4)

1. Institut metallurgii Ural'skogo filiala Akademii nauk SSSR.,
(Serov region--Iron ores) (Chromite)

ABRAMOV, B. A.

PART I BOOK REVISIONS 807/613

Abramov, B. A. Book. Booklet. 1961. 100 pages.

Fevery booklets i kompleksoy izdatel'stvo, sryim i metallurgii (Problems of Control and Complete Utilization of Iron Materials in Metallurgy) Izdatel'stvo, 1960. 194 p. (Series: Itz. Izd., 77. 5) Brutto ally inserted. 1,000 copies printed.

Red. M. I. Zocher, and V. P. Chernobrovits, Candidates of Technical Sciences. Ed. of Publishing House: L. M. Duda; Tech. Ed.: L. A. Imshenova, and B. P. Shvachkin.

PURPOSE: This collection of articles is intended for technical personnel of metallurgical plants and for members of scientific research institutes.

CONTENTS: The collection contains articles discussing a variety of problems pertaining to ferrous and nonferrous metallurgy. A number of articles describe new methods for investigating the properties of alloys and oxides and review changes which these properties undergo as a result of the effect of temperature and other factors. Findings of studies are summarized in numerous articles and processes to be used for manufacturing ferroalloys and naturally-alloyed steels are examined. Characterization of various metal compounds are given and measures for the most efficient utilization of these are indicated. Some of the articles are devoted to the study of problems of manufacturing ferrous, nonferrous, and rare metal alloys. The selection of methods made on the basis of the need for material relating to the improvement of the quality control of alloys and the manufacturing processes employed by producers. No specialities are mentioned. Each article is accompanied by references, most of which are Soviet.

Abstracts, B. A. Ch. The Problem of Producing Naturally-Alloyed Vanadium Steel From Vanadium Pig Irons Free of Sulfur and Phosphorus by Blowing Process 81

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Bravda, V. T., and L. P. Zhurav. On the Recovery of Sulfuric Acid and Potassium Sulfate from Wastewater of Sulfuric Acid and

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REVEBTSOV, V.P.; ABRAMOV, B.A.; TANTSYREV, V.V.; ZAYTSEVA, Ye.I.

Results of using ferromanganese and manganese-silicon from
Pelunochnoye deposit ores in the production of steel. Trudy Inst.
met. UFAN SSSR no.7:183-199 '61. (MIR. 16:6)
(Manganese alloys--Testing) (Steel--Metallurgy)

REVEBTSOV, V.P.; ABRAMOV, B.A.; NAGOVITSYN, D.F.; LEBEDEV, A.A.;
OSIPOV, G.V.; TANTSYREV, V.V.; ISUPOV, V.F.; ZAYTSEVA, Ye.I.

Quality of manganese ferroalloys from ores of the Polunochnoye
deposit. Stal' 21 no.9:806-809 S. '61. (MIRA 14:9)

1. Institut metallurgii Ural'skogo filiala Akademii nauk;
Nizhne-Tagil'skiy metallurgicheskiy kombinat i Kombinatsiya
Serova.

(Ferromanganese) (Polunochnoye region--Manganese ores)

VATOLIN, N.A. (Sverdlovsk); YESIN, O.A. (Sverdlovsk); ABRAMOV, B.A.
(Sverdlovsk)

Investigating iron-vanadium melts by the electromotive force
method. Izv.AN SSSR. Otd.tekh.nauk. Met.i topl. no.4:51-55
Jl-Ag '62.

(Iron-vanadium alloys--Electric properties) (MIRA 5:8)

ABRAMOV, B. A., KOGAN, V. I.,

"Transfer of Impurity Resonance Radiation in Low-density Plasma,"

report presented at the 6th Intl. Conf. on Ionization Phenomena in Gases,
Paris, France, 8-13 Jul 63

ABRAMOV, B.A.

Thermodynamic stability of the processes of refining molten
Fe-V-C-Si and Fe-Cr-C-Si with conservation of vanadium and
chromium. Sbor. nauch. trud. Ural. politekh. inst. no.126:
100-111 '63
(MIRA 17:8)

AUTHORS: Abramov, B.G., Pogorelyy, A.I. SOV-128-58-8-13/21

TITLE: The Molding of Worm Gear Wheels and Pinions With Cast Gears
(Formovka chervyachnykh kol'ets i shesteren s litym zubom)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 8, pp 20-21 (USSR)

ABSTRACT: A method is described in the article, utilizing molding patterns and model segments, in the production of small numbers of worm gear wheels and pinions. The model segment is shown in Figure 1, the device for molding in Figure 2. The described method is recommended for single and small-series production in repair shops, etc. There are 4 sets of diagrams.

1. Gears--Molding

Card 1/1

KOVAL'CHUK, P.Ye.; ABRAMOV, B.K.; IVASHCHENKO, Yu.F.

Potential savings in electron tubes. Vest. svyazi 23 no.3:16 1r '63.
(MIRA 16:3)

1. Rabotniki smeny ul'trakorotkikh voln radiostantsii Kiyevskogo
teletsentra.
(Electron tubes) (Radio, Shortwave—Equipment and supplies)

ABRAMOV, B. L.

PA149T43

USSR/Engineering - Mechanics
Materials Testing

Sep/Oct 49

"Torsion of Prismatic Rods With Cruciform Transverse Cross Section," B. L. Abramov, 6 pp.

"Prikl Mat i Mekh" Vol XIII, No 5

Gives solution of the problem of torsion of prismatic rods with cruciform cross section by using N. Kh. Arutyunyan's method to solve Poisson's equation. Formulas obtained determine stresses and rigidity of profile for various ratios of b/d , starting from b/d equals one (square cross section). Submitted 21 Jun 49.

149T43

ABRAMOV, B.M., kand. tekhn. nauk, dotsent

Using link mechanisms for approximate plotting of given
trajectories. Izv. vys. ucheb. zav.; mashinostr. no.7:
22-26 '65. (MIRA .8:12)

1. Submitted September 3, 1963.

ABRAMOV B. M.

Oct 48

USSR/Engineering
Mechanics
Mathematics, Applied

"Problem of the Motion of Machines Under the Action of Given Forces," Acad I. I. Artobolevskiy
B. M. Abramov, Inst Mach Studies, Acad Sci USSR, 3 1/2 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 10

General equation of motion of a machine or mechanism with one degree of freedom can be written as follows:
$$M \ddot{\varphi} - M_s = J_p \frac{d\varphi}{dt} + \frac{U^2}{J_p} \frac{dJ_p}{d\varphi}$$

where M = moment of reduced motive forces,

M_s = moment of reduced resistance forces,

J_p = reduced moment of inertia of mechanism, and φ = angle of revolution of reduction link. Solution presents difficulties in many cases, especially when the moments M_p and M_s depend, not only on the angle of revolution φ , but also on other variables. Explains method for overcoming such difficulties. Submitted 2 July 48.

PA 2/49T29

LIBRARY J. E. PA.

AMR

Mechanics (Dynamics, Statics, Kinematics)

13. I. I. Artobolevskii and B. M. Alkhamer, On a form of the equations of motion of a machine (in Russian), Doklady Akad. Nauk SSSR 80, 1261-1264 (1948).

The angular velocity ω of the driving link of a rotating or vibrating mechanism varies with the following quantities: the moment of inertia J , and the difference ΔM between the driving moment and the resisting moment, each of which varies with the position angle ϕ . The motion is solved by a step-by-step integration process in which constant "fictitious" values (designated by the zero subscripts) are used over intervals in accordance with the reduced equation $\Delta M_0 = J d\omega/dt$. The method is illustrated by a practical graphical example. M. Chikilov, USA

Jan '52

U. S. S. A. METALLURGICAL LITERATURE CLASSIFICATION

<p>1354. I. I. Artobolevski and B. M. Abramov, "Solution of the equation of motion of a machine for forces depending on velocity" (in Russian), <i>Nauka Acad. Sci. USSR (Doklady Akad. Nauk SSSR)</i>, Mar. 1948, vol. 50, no. 9, pp. 1541-1544.</p> <p>A method of approximations requiring the plotting of a number of graphs to determine the time variation of the angular position of a linkage is given. No mention of a machine is made.</p> <p>John M. Kopper, USA</p>																									
<p>1354. I. I. Artobolevski and B. M. Abramov, "Solution of the equation of motion of a machine for forces depending on velocity" (in Russian), <i>Nauka Acad. Sci. USSR (Doklady Akad. Nauk SSSR)</i>, Mar. 1948, vol. 50, no. 9, pp. 1541-1544.</p> <p>A method of approximations requiring the plotting of a number of graphs to determine the time variation of the angular position of a linkage is given. No mention of a machine is made.</p> <p>John M. Kopper, USA</p>																									